#### THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper Nos. 102 and 95

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Patent Interferences No. 102,922 & 103,088

David Dumas Junior party<sup>1</sup>

v.

Robert Gill, Senior party <sup>2</sup>

Patent granted to Robert Gill, on September 15, 1992, (continued...)

<sup>&</sup>lt;sup>1</sup> Application of David Dumas, Serial No. 07/748,486, filed August 22, 1991. Accorded benefit of U.S. Serial No. 07/508,156, filed April 11, 1990. Ivan G. Szanto and Steven H. Markowitz, Alan H. Bernstein, Stanley H. Cohen, Manny D. Pokotilow, Barry A. Stein, Martin L. Faigus, Max Goldman, Eric S. Marzluf and Robert S. Silver, Attorneys for Dumas.

<sup>&</sup>lt;sup>2</sup> Application of Robert Gill, Serial No. 07/490,909, filed March 8, 1990. Edward Whitfield, Rudolf E. Hutz, Harold Pezzner, John D. Fairchild, Richard M. Beck, Paul E. Crawford, Thomas M. Meshbesher, Patricia Smink Rogowski, Robert G. McMorrow, Jr., Ashley I. Pezzner, Attorneys for Gill.

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Pretreatment of Filler with Cationic Ketene Dimer

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Pretreatment of Filler with Cationic Ketene Dimer

Final Hearing: December 13, 1994

Before CAROFF, DOWNEY and SCHAFER, <u>Administrative Patent</u> <u>Judges</u>.

DOWNEY, Administrative Patent Judge.

# FINAL DECISION

Interference No. 102,922 (hereinafter '922) involves an application Ser. No. 07/748,486 filed on behalf of David H. Dumas (Dumas), assigned to Hercules, Inc. (Hercules) and an application Ser. No. 07/490,909 filed on behalf of Robert A. Gill (Gill), originally assigned to Pfizer, Inc. (Pfizer) and

<sup>&</sup>lt;sup>2</sup>(...continued)

Patent No. 5,147,507, filed December 17, 1990, Serial No. 07/628,318. Accorded benefit of U.S. Serial No. 07/490,909, filed March 8, 1990. Edward Whitfield, Rudolf E. Hutz, Harold Pezzner, John D. Fairchild, Richard M. Beck, Paul E. Crawford, Thomas M. Meshbesher, Patricia Smink Rogowski, Robert G. McMorrow, Jr., Ashley I. Pezzner, S. Delvalle Goldsmith, Paul B. West, Lester Horwitz, Joseph R. Handelman, Peter Galloway, John Richards, Iain C. Baillie, John J. Chrystal, Thomas F. Peterson, Richard J. Streit, Richard P. Berg, Alan K. Roberts, and Julian H. Cohen, Attorneys for Gill.

now assigned to Mineral Technologies, Inc.

The subject matter in issue in the '922 interference comprises a composition containing inorganic filler particles that are surface treated with a certain cationic polymer (Count 1) and to the method of making the surface treated filler (Count 2). The inorganic particles include calcium carbonate, clay,

titanium dioxide, talc and silica/silicate. The cationic polymer

is an alkyl ketene dimer(AKD) of a certain formula made cationic

as a result of treating the dimer with a natural or synthetic cationic polymer, e.g., a polyamido-amide and/or a polyamine polymer reacted with a epoxidized halohydrin such as epichlorohydrin. The two counts are set forth in APPENDIX A. Dumas' claims 1-9 and Gill's claims 2-8 and 10-12 correspond to count 1; and Dumas's claims 10-16 and Gill's claims 14 and 15

correspond to count 2.

Interference No. 103,088 (herinafter '088) involves the

above noted Dumas application Ser. No. 07/748,486 assigned to Hercules, and a U.S. patent No. 5,147,507 filed on behalf of Gill, originally assigned to Pfizer and now assigned to Mineral Technologies, Inc. This second interference was declared as a result of a Dumas 37 CFR § 1.633(c)(1) motion in '922 requesting that count 3 directed to a method of making paper and paperboard be added to '922. Since the involved Gill application in '922 did not contain claims directed to such method but Gill's divisional application, U.S. patent 5,147,507 did, the Administrative Patent Judge (APJ) treated the Dumas motion as a motion to declare another interference directed to the method, granted the motion, and declared the second interference.

The subject matter in issue in the '088 interference comprises a process of making paper or paperboard employing the

surface treated filler of the '922 interference. The count is set forth in APPENDIX B. Dumas claim 16 and Gill claims 1 and 2 correspond to the count.

No questions of interference-in-fact or separate

patentability of claims in accordance with 37 CFR § 1.633(b) or

37 CFR § 1.633(c)(4) have been raised in either interference.

Gill is senior party in both interferences by virtue of the March 8, 1990, filing date accorded to him in the respective declaration notices. Gill did not take any testimony in either interference to establish a date earlier than the March 8, 1990 date. Therefore, Gill is restricted to his filing date; and Dumas, as junior party, must establish priority by a preponderance of the evidence. Peeler v.

Miller, 535 F.2d 647, 651, 190 USPQ 117, 120 (CCPA 1976). For its case on priority, the party Dumas relies upon two alternative grounds: (1) derivation by senior party Gill; and (2)actual reduction to practice before the March 8, 1990 date of senior party Gill.

Both parties filed records, 3 briefs 4 and appeared at final hearing.

 $<sup>^{\</sup>scriptscriptstyle 3}$  The Dumas and Gill record and exhibits will be referred to herein by DR, DX, GR and GX followed by the appropriate page or exhibit number.

<sup>&</sup>lt;sup>4</sup> The Dumas and Gill briefs will be referred to as DB, GB and DRB followed by the appropriate page number.

The Dumas record<sup>5</sup> consists of Exhibits 1-22 and the declaration testimony of junior party inventor David H. Dumas (Dumas), deposition testimony of employees of Hercules: Bruce Evans (Evans) who left Hercules sometime in 1989 to work for Pfizer, William Hosker (Hosker), Robert Alberts (Alberts), Thomas Fredericks (Fredericks), Marianne Bleyer (Bleyer), John Gast (Gast), Jon Techentin (Techentin), Thomas Rienzo (Rienzo), Allen Kelly (Kelly), and senior party inventor Robert Gill (Gill), as well as rebuttal testimony of Dumas and Gast.

The Gill record consists of the declaration and deposition testimony of Dr. Scott (Scott) and Exhibits 1-3.

The following issues are for our consideration:

- 1. Did Gill derive the invention from Dumas?
- 2. Does the Dumas record establish an actual reduction to practice prior to March 8, 1990, the effective filing date accorded Gill.
- 3. Did the work done at Pfizer inure to the benefit of Dumas?
- 4. Whether the inventorship of the Dumas application is correct.

<sup>&</sup>lt;sup>5</sup> The records filed in both interferences are identical. See Paper Nos. 29 and 30 in the '088 interference.

In addition, the following pending motions are presented for our

### consideration:

- 5. The Dumas 37 CFR § 1.635 motion requesting consideration of Dumas Exhibits, DX 15-21.
- 6. The Gill motion to suppress.
- 7. In '088, Gill motion to strike Dumas'brief and Dumas motion to file a substitute brief.

I.

### Preliminary matter

Initially, we note that even before Gill filed his testimony, Dumas filed a motion to strike [sic: suppress] the testimony of Dr. Scott (Paper Nos. 77 ('922) and 62 ('088)). Gill offered the Scott testimony to show no reduction to practice by Dumas. Since, we do not reach issue 2 (above) in this decision, the Dumas motion is <u>dismissed</u> as moot. Had we reached that issue, the Dumas motion would also have been

dismissed since Dumas did not file a motion to suppress with his brief as required by rule, 37 CFR § 1.656(h) nor did he raise in his brief the earlier filed motion to suppress.

Accordingly, the comment in the Dumas reply brief that the motion to strike is incorporated therein is not entitled to consideration.

II.

## Item 7

The Dumas motion to file a substitute brief is granted and

the Gill motion to strike is dismissed as moot.

III.

# Item 5: Dumas 37 CFR § 1.635 motion

Dumas filed a 37 CFR § 1.635 motion requesting consideration of certain exhibits DX 15 - 21 (Paper No. 48 in '922 and No. 33

in '088). The motion stands opposed (Paper No. 51 in '922 and

No. 36 in '088). A reply was filed (Paper No. 62 in '922 and No. 48 in '088).

A review of the list of documents filed pursuant to 37 CFR

§ 1.673(b) (Exhibit A attached to the motion) shows that DX 15 and DX 16 were part of the original list that was given to Gill prior to the conference. Gill does not allege otherwise. Hence DX 15 and DX 16 are part of the record and the motion as to them is dismissed as moot.

Dumas exhibits, DX 17 - 20 further define components set forth in Dumas exhibits, DX 4 - 6. DX 21 prepared by Techentin is a compilation of time spent on DX 7 and DX 9.

The motion is <u>granted</u> as to Dumas exhibits, DX 17 through 21.

37 CFR § 1.673(c) permits a party to file a motion to correct deficiencies with respect to documents not served in accordance with 37 CFR § 1.673(b). During his assigned testimony period, Dumas promptly filed his motion for consideration of these exhibits. We find no prejudice to Gill

in relying upon these exhibits served during the Dumas testimony period prior to

the taking of any deposition testimony with respect thereto.

The record clearly shows that while these exhibits were not provided

to Gill as part of Dumas' 37 CFR § 1.673(b) list prior to the start of deposition testimony, these exhibits were provided to Gill prior to the taking of deposition testimony with respect to

them.

Gill in opposing the motion, argues that the delay in his receiving the exhibits did not allow him adequate time to prepare for cross-examination of the witnesses or to consult his experts. However, the only objection in the record raised by Gill was that these documents were late-marked and not part of the 37 CFR § 1.673(b) notice. Gill did not voice any objection on the record that he did not have adequate time nor did he request additional time to prepare for cross-examination and to consult with his experts with respect to DXs 17 through 21. Accordingly, Gill's opposition is without merit.

IV.

# Item 6: Gill motion to suppress evidence

Pursuant to 37 CFR § 1.656(h), Gill filed a motion to suppress (Paper No. 92 in '922 and No. 78 in '088). The motion stands opposed (Paper No. 94 in '922 and No. 86 in '088). A reply was filed (Paper No. 96 in '922 and No. 89 in '088).

In the motion, Gill requested that Dumas Exhibits, DX 4-6, 17-20, and 22, the data in DX 7 and 9, and the related testimony

including the testimony of Mr. Techentin relating to the AKD formulation be stricken or denied consideration.

More specifically, Gill urges that (1) DX 4-6 and 17-20 should not be considered because they do not comply with the best evidence rule; (2) the sizing data of DX 7 and 9 and related testimony should be stricken because of (a) questionable reliability, (b) hearsay and because (c) the original data on which the summary data was based was destroyed under circumstances suggesting bad faith; (3) DX 22 should be stricken because it is incomplete and irrelevant; and (4) the testimony of Mr. Techentin relating to the AKD

formulation should be stricken because it was based on an unmarked document.

As to (1) and (2)(b) and (c), the motion to suppress is dismissed for failure to comply with 37 CFR § 1.685(d). 37 CFR § 1.685(d) states that "an objection to ...admissibility of evidence is waived unless an objection is made on the record at

the deposition stating the specific ground of objection." While

Gill placed an objection on the record with respect to DX 15-21 as not complying with 37 CFR § 1.673(b), Gill failed to place any objection on the record with respect to DXs 4-7, 9 and 17-20 for the reasons now alleged.

As to (2)(a) and (3), the motion is <u>denied</u>. DX 22 was submitted by Dumas as part of his 37 CFR § 1.682 notice. Gill filed an objection to DX 22 urging that the document should not be admitted because it was incomplete and irrelevant. Gill's

argument as to adequacy of the evidence goes to weight and not

admissibility. Salem v. Bendell, 217 USPQ 920, 924 (Bd. Pat. Int. 1983); Hollis v. De Petris, 201 USPQ 871, 873 (Bd. Pat. Int. 1977). Evidence is not ordinarily stricken for irrelevance or questions of reliability; those go to the weight rather than admissibility. Suh v. Hoefle, 23 USPQ2d 1321, 1329 (Bd. Pat. App. & Int. 1991); Halbert v. Schuurs, 220 USPQ 558, 561 (Bd. Pat. Int. 1983).

As to (4), the motion is <u>dismissed</u>. 37 CFR § 1.685(d). Regarding the testimony of Techentin and the formula of the count, Gill did not point to any objection in the record and the Board can find neither an objection specific to this testimony nor a specific ground of objection with respect to the formula. See DR 299-302.

A review of the record (DR 303, 306-307, 310 and 311) indicates that Gill later voiced objections during Techentin's testimony as to three unmarked documents. To wit, that Dumas was "trying to get a document into the record when you know our position on late-marked documents."

Even assuming arguendo that these later objections, by

inference, referred to Techentin's testimony at DR 299-302, we would deny the motion. FRE Rule 612 permits the use of a document to refresh one's memory and an adverse party is entitled to "...inspect it, to cross-examine the witness thereon, and to

introduce in evidence those portions which relate to the testimony of the witness." The record is clear that Gill did not ask to inspect the document nor did he introduce the same into the record.

Gill argues that the Techentin testimony "cannot be considered as simply refreshing Mr. Techentin's recollection because cross-examination showed that Techentin never had original individual knowledge to be refreshed." We cannot agree with Gill's argument. Initially we point out that Gill placed no objection on the record regarding the use of the document to refresh one's memory. Moreover, in our view, Gill's question and

<sup>&</sup>lt;sup>6</sup>Gill asked Techentin on cross-examination "Was your sketching of this formula based upon the formula Mr. Bernstein showed you and on your reading of Exhibit 17?" Techentin answered "Yes". DR 367-368.

Techentin's answer do not establish that Techentin did not have original knowledge as to alkyl ketene dimer formula. In our

view, the record indicates that Techentin, an employee of Hercules since 1956 in a variety of positions, had personal knowledge of alkyl ketene dimer and its structure as evidenced by Techentin's testimony that Aquapel® 364 was a flake dimer, alkyl ketene dimer which Hercules began making in 1958 and that it had not changed significantly since that time; that when asked if he could draw the formula, his initial response was "If I can have a pen." and "Can I reference anything?"; that it had been a long

time since he drew the structure for a seminar and that the formula he drew was of a general nature with the R's being residues of fatty acids having chain lengths of C8-C30. DR 298-301.

Furthermore, the interference record as a whole clearly establishes the structural formula for the alkyl ketene dimer and confirms the controverted testimony of Techentin. See discussion, infra.

٧.

The Dumas case for priority

The junior party's record indicates the following: In October 1986, inventor Dumas, an employee of Hercules at the Wilmington, Delaware facility had an idea of treating clay, calcium carbonate and other fillers with Hercon® emulsions to

render them easy to size (DX 3). On October 30, 1986, Dumas sent a work request to the attention of Techentin at Hercules' Kalamazoo, Michigan facility asking that clay be dispersed in 0.35% Hercon® 40 and that handsheets employing 10 and 20% filler level be made and evaluated. (DX 7 page 1) Dumas, himself, identified Hercon® 40 as a AKD cationic emulsion containing alkyl ketene dimer known under the name of Aquapel® 364 and Resin 2399 in a 1:1.5 ratio; and identified Resin 2399 as a cationic polymer resin used in Hercon® emulsions made by condensing

diethylenetriamine(DETA) and dicyandiamide(DICY) and later cross-

linked with epichloride to yield the cationic polymer resin (DR-12-14, and 17-18). DXs 4 and 17-19 confirm Dumas' testimony with regard to the content of Hercon® 40. Techentin

acknowledged

receipt of the request and forwarded it to Kelly, who pretreated the filler by mixing clay with the Hercon® 40 and prepared the other chemicals necessary for the paper makers to make the handsheets. (DR 22, DX 7, pages 2-3). The papermakers made the handsheets as directed (DX 2) and returned them to Kelly who examined them and sent them off for testing. The testing showed improved sizing for the prepared handsheets containing clay treated with Hercon 40®. (DR 27, DX 7, pages 4-15). Dumas, Rienzo and Alberts all acknowledged receipt of DX 7.

In April 1987, Hercules and Pfizer, the largest
manufacturer of precipitated calcium carbonate (PCC), executed
a secrecy agreement directed to the use of proprietary
Hercules cationic

dispersants to prepare on site calcium carbonate slurries with improved sizing efficiency (DR 28, DR 78 and DX 8). On July 23, 1987, Dumas, and corroborators Fredericks and Evans visited Pfizer, in Easton Pa. meeting with Gill and other

representatives of Pfizer. At the meeting, Dumas told Gill of his experience with clay treated with Hercules cationic dispersants to obtain improved sizing and proposed that Pfizer try to make stable slurries in their precipitated process using Hercules' products. Pfizer and Hercules agreed to exchange products with Pfizer

giving Hercules PCC, under the tradenames Albacor® 5970 and Alboglos® SF, for testing and with Hercules sending Pfizer their cationic dispersant product. Both parties sent memos to their respective people regarding the substance of this July 23, 1987, meeting. See DX 8, DX 15 and DR 126.

On July 24, 1987, Dumas sent a second work request to the attention of Rienzo at the Kalamazoo facility seeking to prepare and evaluate handsheets containing 10-20% calcium carbonate (PCC given Hercules at the July 23, 1987, meeting) dispersed with 0.35% Hercon® 48 (DX 9). Dumas himself, testified that Hercon® 48 was 1:1 ratio of AKD and the cationic resin used in Hercon® 40. (DR 12-13) Rienzo acknowledged receipt and forwarded the

request to Kelly who again made the treated fillers and other

chemicals and forwarded them to the papermakers to make the handsheets. The handsheets were returned to Kelly and sent for testing. Alberts received document DX 9 containing the request and results. (Alberts DR 172-174, Evans DR 91-92, 95-100, Fredericks DR 217-221, Kelly DR 403, 407, and Rienzo DR 389-390). The tests showed improved sizing for the treated Hercon® PCC (DR 37-39).

On August 20 1987, Hercules sent to Pfizer samples of the Hercon® cationic dispersants, Hercon®48 and Hercon®85 labeled X20870-36 and X20870-37, respectively. On December 1, 1987, Peters of Pfizer sent a memo to Gill, with a copy to Dumas, indicating that Pfizer prepared handsheets as instructed containing Pfizer's PCC treated with .2 and .8% Hercules products X20870-36 and X20870-37. Pfizer concluded that there was only a slight improvement. When Dumas and corroborator Evans next met with Gill and others in Wilmington, on December 10, 1987, Pfizer asked what they could do to improve the results they obtained and Hercules suggested that they lower the pH and reduce the holding time of the slurry (DX 11). Dumas' memo (DX 11) confirms this meeting and indicated that Pfizer would repeat their work and get back to Hercules. On Jan. 22, 1988 (DX 12), Peters sent a memo to

Gill, with a copy to Dumas, indicating that Pfizer performed a second handsheet study to reexamine the effect of Hercules

products implementing the suggestions offered by Hercules.

Pfizer found that paper containing PCC treated with Hercules cationic dispersants, X20870-36 and X20870-37 showed improved sizing. At this time, Pfizer still did not know the content of the Hercules' cationic dispersants sent them as part of the agreed upon exchange. When Gill, Dumas, and corroborator Fredericks again met on November 10, 1989, Gill showed Hercules some data from treating PCC with Hercon® 85 and M-1170 and that the data showed very different results. Both Dumas and Hosker testified that M-1170 and Hercon®85 were the same product and, hence, the results were inconsistent and should have been essentially the same. At the November,

the content of the Hercules' cationic dispersant sent to them.

And Gill acknowledges that Dumas revealed to him the content
of the Hercules cationic polymeric material. DR 135.

Opinion

In the '922 interference, both Gill and Dumas consider

count 1 and count 2 together in their respective briefs and we will do likewise.

The counts in both interferences are in the disjunctive form. In '922, the first section of count 1 is Gill's claim 3 (referred to by the parties as the Gill version) and the second section is Dumas' claim 1 (referred to by the parties as the Dumas version) and the first section of count 2 is Gill's claim

14 (Gill version) and the second section is Dumas' claim 10 (Dumas version). In '088, the first section of count 1 is Dumas' claim 16 (Dumas version) and the second section is Gill's claim 1 (Gill version). Both sections of each count define the same patentable invention. To prevail, Dumas must establish priority or derivation (originality) of at least one section of each count before March 8, 1990.7

Derivation and priority are distinct concepts.

<sup>&</sup>lt;sup>7</sup> Dumas has cited an unpublished nonprecedential opinion to support his position that he need only show priority with respect to one section of the count sans limitations that are not found in the other section. The citation of such opinion is inappropriate and nonbinding on this record.

Derivation addresses originality determining who invented the subject matter. While priority focuses on which party first invented the subject matter of the count. Bosies v. Benedict, 27 F.3d 539, 542-543, 30 USPQ2d 1862, 1865 (Fed. Cir. 1994). Derivation is a question of fact. Price v. Symsek, 988 F.2d 1187, 1190, 26 USPQ2d 1031, 1033 (Fed. Cir. 1993). To prove derivation, a party must show (1) prior conception of the subject matter of the count; and (2) communication of the conception to the opponent Id., 988 F.2d at 1190, 26 USPQ2d at 1033; Hedgewick v. Akers, 497 F.2d 905, 908, 182 USPQ 167, 169 (CCPA 1974). Communication is sufficient if the one who thought up the invention communicates it to another who is to try it out.

Applegate v. Scherer, 332 F.2d 571, 573-74, 141 USPQ 796, 799 (CCPA 1964) Further, the party must show that the communicated subject matter would have been sufficient to enable one of ordinary skill in the art to construct and successfully operate the subject matter of the count. Mead v. McKirnan, 585 F.2d 504, 507, 199 USPQ 513, 515 (CCPA 1978).

On the basis of the above facts, we conclude that Dumas has established by a preponderance of the evidence that he, Dumas, was the inventor of the invention defined by the counts (Gill version) in both interferences and that Gill derived the invention from him. Dumas had a complete conception of the invention as evidenced by DX 7 and DX 9 and that conception was

communicated to Gill prior to the date accorded Gill. Hence, in our view Dumas has sustained his burden of proof in both interferences. In addition, we find that the testing of the Hercules products on PCC and the making of the handsheets therefrom by Pfizer inures to the benefit of Dumas. Shumaker v. Paulson, 136 F.2d 700, 703, 58 USPQ 279, 282 (CCPA 1943).

Gill argues that the Dumas showing has not shown every feature of the count, to wit, that the alkyl ketene dimer and its cationic properties are not adequately identified. Gill urges that the only way to establish the identity of Hercon® 40 and

Hercon® 48 is to go to the notebooks of Dumas which notebooks were never entered into the record. We are not persuaded by

the

Gill arguments. Initially, we point out that Dumas himself testified that Hercon ®40 and Hercon® 48 contain alkyl ketene dimer and a cationic resin. This testimony is corroborated by the manufacturing specifications put out by Hercules who makes these products, DX's 4-5 and 17-198 and by the testimony of Evans (DR 74-75) and Hosker(DR 147-148, 154-155), long time employees

of Hercules, who indicated their awareness of the contents of these products. Alberts (DR 169, 178-181, 198-199) and Fredericks (DR 212-213, 216-217, 238-240) both product supervisors for AKD at Hercules, also indicate their familiarity with the product and its formulation. Both indicate that the

specifications of Hercon® would not change nor would the ratios of resin to dimer. Techentin provided the structure for AKD. This evidence is further confirmed by Gill, himself, who acknowledges that AKD was a commercially available product

<sup>&</sup>lt;sup>8</sup> DX4 and DX5 identify Hercon® 40 and 48 as containing Aquapel® 364 and Resin 2399 in dffering ratios, DX-17 identifies Aquapel® 364 as ketene dimer. DX 19 identifies Resin 2399 as polymer 2399 and epichlorohydrin. DX identifies polymer 2399 as diethylenetriamine (DETA) and dicyandiamide (DICY).

that could be purchased in the open market and that its composition and formula was publicly available at the time in question (GB

41). Gill cites in Appendix C a number of U.S. Patents which clearly identify AKD and cationic resins in Hercon® emulsions. Generally, documents attached to a parties' brief, which were not properly submitted into the record pursuant to 37 CFR § 1.682, are not given any consideration by the Board. In this instance, however, we have considered these documents viewing Gill's acknowledgment as an admission. These documents establish the formula for alkyl ketene dimers where R is hydrocarbon with a minimum of 8 carbons (U.S. Patent 4,470,877, column 8, lines 27-35; and 4,426,466, column 4, line 59-column 5, line 2); that AQUAPEL® 364 purchasable from Hercules contains AKD made from a mixture of palmitic and stearic fatty acid (U.S. Patent

3,905,397, col. 4, lines 53-56); that Hercon® 40 commercially available from Hercules contains AKD treated with epichlorohydrin/aminopolymer resin formed by reacting

dicyandiamide and diethylenetriamine (U.S. Patent 4,426,466, Table II, column 4, lines 8-24, column 10, lines 15-25) and that the AKD resins are, in fact, cationic and possess tertiary and quaternary amine groups (U.S. Patent 4,405,408, column 1, lines 60-61, column 4, lines 47-62).

Moreover, as pointed out by Dumas, Gill employs Hercon® emulsions himself in his application. Gill argues that since he

did not identify which Hercon® emulsion he used, it is not enough

to identify the alkyl ketene dimer and cationic properties.

We find Gill's argument without merit. Certainly the reliance on the commercially available Hercon® emulsions to identify the alkyl ketene dimer and its cationic properties of the count by Gill must also be accepted as sufficient for Dumas.

Gill also argues that Dumas did not establish whether or not the Hercon® used in DX 7 and 9 had the required "R" value with 8 or more carbon atoms. Gill alleges that the R may be one

carbon. Gill cites no evidence that R may be one. In fact, Gill admits in their brief (GB 41) that the alkyl ketene dimers are

commercially available and that their formula is known. The prior art in the record establishes that AKD contains alkyl groups containing a minumum of 8 carbon atoms. See U.S. Patent

Nos. 3,905,397; 4,428,466 and 4,470,877.

Gill also argues that Dumas has not shown the limitations "at least 95% polymer" and in '088 that the process step of forming a laid cellulosic sheet by dewatering the aqueous dispersion and drying the cellulosic sheet to form the desired paper and paper products in the Dumas version of the counts. We find that Dumas made a satisfactory showing as to the Gill version of each of the counts in each interference. Hence, these arguments by Gill are not persuasive.

Gill contends that derivation was not proven because

Dumas did not establish (1) what was in Gill's mind or what

knowledge Gill had at the time of the invention; (2) what took place at earlier meetings between Gill and Dumas; and (3) that Dumas did not derive from Gill.

We are of the opinion that Dumas has established his charge that the party Gill derived the invention from him.

Gill's failure to offer testimony to rebut Dumas testimony on the issue of originality raises a strong presumption that it is accurate.

<u>Tolle v. Starkey</u>, 255 F.2d 935, 937, 118 USPQ 292, 295 (CCPA 1958).

Gill believes that Dumas must establish what was in Gill's

mind at the time of derivation. Gill has cited no authority to support his position. On the contrary, Dumas' burden was to establish conception and communication. An absolute defense to

the charge of derivation is for the opponent to prove an earlier conception. Herein, Gill made no attempt to prove an earlier conception.

Gill indicates that Gill testified that AKD was one of the many products being evaluated (DR 132 and DX 10). A review of this testimony and more specifically DX 10 shows

that the AKD being tested was either the Hercules cationic dispersants given

to them by Hercules applied to filler particles or that of Hercon® 48 used as an internal sizing agent.

Gill also urges that there is nothing in the record that indicates Gill acquired the knowledge of the claimed invention from Dumas. The record is clear that Dumas told Gill the content of their cationic dispersant material, Gill does not deny this. Moreover, Gill does not establish an earlier conception.

Gill alleges that the Gill preliminary statement indicates that Gill suggested the idea to Dumas in 1986.

However, the use of the preliminary statement as evidence is misplaced. 37 CFR

§ 1.623(d) specifically precludes the use of a preliminary statement as evidence in behalf of the party making it.

If Gill felt that the earlier meetings were of some importance to challenge the charge of derivation, then it was Gill's obligation to provide that testimony in rebuttal of the

charge. Gill made no such rebuttal.

In view of the fact that Dumas has established priority of

the invention based on derivation by Gill, the question of Dumas' reduction to practice becomes immaterial. Hence, item 2 is deemed moot.

VI.

Item 4

Gill raises a question in his brief, GB 41-42, as to whether the inventorship in the Dumas application is correct.

37 CFR § 1.655(a) states that the Board may consider at final hearing any properly raised issue, including priority of invention, derivation by an opponent, patentability, and admissibility. 37 CFR § 1.655(b) states that a party shall not be entitled to raise for consideration at final hearing any

matter which properly could have been raised by a motion under 37

CFR §§ 1.633 or 1.634 unless the matter was properly raised in a motion that was timely filed by the party under 37 CFR §§

1.633 or 1.634 and the motion was denied or deferred to final hearing.

The Board, in the interest of justice, may also exercise its discretion to consider an issue.

Gill filed a motion to strike Dumas' preliminary statement; he does not now seek review of that motion. Gill filed no other motions, he did not file a motion for judgment pursuant to 37 CFR § 1.633(a) that Dumas was not entitled to his claims under 35 U.S.C. § 102(f/g). Accordingly, we will not consider Gill's arguments now raised with respect to the inventorship of the

Dumas application. In addition, Gill does not ask us to exercise our discretion, and we do not find it necessary to do so.

In view of our findings above, junior party Dumas is entitled to prevail in both interferences and judgment is so entered.

#### JUDGMENT

Priority of invention of the subject matter of counts 1 and 2 in Interference No. 102,922 is awarded to David Dumas, the junior party. On this record, David Dumas is entitled to a patent containing claims 1-16 corresponding to counts 1 and 2 and

Robert Gill is not entitled to claims 2-8 and 10-12 corresponding to count 1 and claims 14 and 15 corresponding to count 2.

Priority of invention of the subject matter of the count in Interference No. 103,088 is awarded to David Dumas, the junior

party. On this record, Dumas is entitled to a patent containing claim 16 corresponding to the count and Robert Gill is not entitled to his patent containing claims 1 and 2 corresponding to count 1.

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MARC L. CAROFF

Administrative Patent Judge
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BOARD OF PATENT
MARY F. DOWNEY

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APPEALS AND
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) INTERFERENCES
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#### APPENDIX A

The two counts in Int. No. 102,988 are as follows:

### Count 1

A composition comprising a papermaking filler material selected from the group consisting of finely ground natural calcium carbonate from limestone, precipitated calcium carbonate, clay, titanium dioxide, talc, silica/silicate pigments and combinations thereof, which has been surface-treated with from about Ø.1 to about 10.0 percent by weight, based on a dry weight of the filler material, of a cationic polymer, which is a dimer of the general formula

where R is a hydrocarbon group selected from the group consisting of alkyl with at least 8 carbon atoms, cycloalkyl with at least 6 carbon atoms, aryl, aralkyl and alkaryl, the dimer having been made cationic by treatment with at least one of a polyamino-amide and a polyamine polymer reacted with

an epoxidized halohydrin compound to form tertiary and quaternary amine groups on the dimer surface

A filler consisting essentially of (a) from about 97 to about 99.9% by weight of inorganic particle selected from the group consisting of calcium carbonate, clay titanium dioxide, talc and hydrated silica; (b) from about Ø.Ø25 to about 2.7% by weight of cellulose reactive size selected from the group consisting of ketene dimer having the general formula

$$R_1$$
-  $CH$ - $C$ = $CH$ - $R_2$   
0= $C$ - $O$ 

where  $R_1$  and  $R_2$  are hydrocarbon groups having from 8 to 30 carbon atoms, alkenyl succinic anhydrides wherein the alkenyl group has from 12 to 30 carbon atoms, hydrophobic isocyanates, carbamoyl chlorides and stearic anhydride; (c) from about 0.00625 to about 2.7% by weight of dispersing agent system comprising at least about 95% by weight of cationic dispersing agent selected from the group consisting of cationic natural polymers, cationic synthetic polymers and mixtures thereof.

### Count 2

A process for the preparation of a papermaking filler material surface-treated with a cationic polymer, said process comprising: adding from about 0.1 to about 10.0 percent by weight, based on a dry weight of the filler material, of a cationic polymer, which is a dimer of the general formula

> R-CH=C-CH-R $O-C=\emptyset$

where R is a hydrocarbon group selected from the group consisting of alkyl with at least 8 carbon atoms, cycloalkyl with at least 6 carbon atoms, aryl, aralkyl and alkaryl, the dimer having been made cationic by treatment with at least one of a polyamino-amide and a polyamine polymer reacted with an epoxidized halohydrin compound to form tertiary and quaternary amine groups on the dimer surface, to an aqueous slurry of a filler material selected from the group consisting of finely ground natural calcium carbonate from limestone, precipitated calcium carbonate, clay, titanium dioxide, talc, silica/silica pigments and combination thereof, said slurry containing solids in an amount of from about 1 to about 76 percent of weight; and maintaining said slurry under agitation at a temperature of from about 5 degrees C to about 70 degrees C

or

A process for the preparation of treated filler consisting essentially of (I) dispersing inorganic particles selected from the group consisting of calcium carbonate, clay, titanium dioxide, talc and hydrated silica in water at a solids content of from about 10 to about 80% by weight; (ii) adding under agitation an aqueous dispersion consisting essentially of (a) from about 1 to about 30% by weight of cellulose reactive size selected from the group consisting of ketene dimer having the general formula

 $R_1$ -CH-C=CH- $R_2$ 

0=C--0

where  $R_1$  and  $R_2$  are hydrocarbon groups having from 8 to 30 carbon atoms, alkenyl succinic anhydrides wherein the alkenyl group has from 12 to 30 carbon atoms, hydrophobic isocyanates, carbamoyl chlorides and stearic anhydride, and (b) from about 10 to about 200%, based upon the weight of cellulose reactive size, of dispersing agent system comprising at least about 95% by weight of cationic dispersing agent selected from the group consisting of cationic natural polymers, cationic synthetic polymers and mixtures thereof, in an amount such that the cellulose reactive size solids added is from about 0.025 to about 2.7%, based upon the weight of inorganic particle.

## APPENDIX B

The count in Int. No. 103,088 is as follows:

# Count 1

In a process for the manufacture of paper and paperboard, said process comprising forming an aqueous dispersion of cellulosic fibers, forming a wet laid cellulosic sheet by dewatering said aqueous dispersion and drying the cellulosic sheet to form the desired paper and paperboard product, the improvement comprising adding to the paper stock dispersion any time prior to sheet formation a filler consisting essentially of (a) from about 97 to about 99.9% by weight of inorganic particle selected from the group consisting of calcium carbonate, clay, titanium dioxide, talc and hydrated silica; (b) from about 0.025 to about 2.7% by weight of cellulose reactive size selected from the group consisting of ketene dimer having the general formula

$$R_1$$
-CH--C=CH- $R_2$ 
O=C--O

where R1 and R2 are hydrocarbon groups having from 8 to 30 carbon atoms, alkenyl succinic anhydrides wherein the alkenyl group has from 12 to 30 carbon atoms, hydrophobic isocyanates, carbamoyl chlorides and stearic anhydride; (c) from about 0.00625 to about 2.75 by weight of dispersing agent system comprising at least about 95% by weight of cationic dispersing agent selected from the group consisting of cationic natural polymers, cationic synthetic

polymers and mixtures thereof

or

a method for improving papermaking by accomplishing at least one of the results of reducing the amount of sizing required, maintaining the sizing

content over time; improve the handling properties of a formed paper web, including water release; improving the physical properties of the resulting paper, including filler retention, filler distribution, tensile strength, and surface coefficient of friction; and improving the optical properties of the resulting paper, including brightness, opacity, and pigment scattering coefficient, the method comprising adding to a papermaking furnish from about 5 to about 50 weight percent of filler material which has been surface-treated with from about 0./1 to about 10.0 weight percent, based on the dry weight of filler material, of a cationic polymer, which is a dimer of the general formula

where R is a hydrocarbon group selected from the group consisting of alkyl with at least 8 carbon atoms, cycloalkyl with at least 6 carbon atoms, aryl, aralkyl, alkaryl, which has been made cationic by treatment with at least one of a polyamino-amide and a polyamine polymer, both of which have been reacted with an epoxidized halohydrin compound, to form tertiary and quaternary amine groups on the dimer surface.